

City of Houston

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The Department Of Public Works and Engineering,  
Utilities Maintenance Branch/Systems Maintenance  
The Central Operations Section (COS)



Research Paper

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## Central Operations Section (COS)

### Introduction

The city of Houston is one of the fastest growing Cities in the country. Servicing a population of 2.4 million citizens requires a complex but flexible and interoperable system of information gathering. Public Works has a formidable task meeting its high demands for service, maintaining 625 square miles of service area. With over 14,000 miles of water distribution and waste water connection lines combined, this complex infrastructure requires a system that is reliable and utilizes effectiveness and continuity through communication. The communication process is not just a colorful metaphor with little reference to the real world. The sender, the receiver, the message and feedback are all vital elements for building communication bridges. The Central Operations Section (COS) receives service requests 24 hours a day 7 days a week. In October COS processed 8,000 Service request. This paper will highlight all the steps taken to provide quality service from the time a custom contacts 311. COS is involved in every aspect of the investigation, the repair, the restoration process to the customer callback. COS is the first and last step in the process to give our customers the reliable service in which they have come to know and deserve. Our mission statement "To be the nation's leading Public Utility, Champion for the environment, providing reliable service of exceptional quality to the most satisfied customers in the nation" is truly mission 1.

## Service Request

COS is the heart of the operation for Public Works and Engineering's, Utility Maintenance Branch (UMB). By interfacing with the Infrastructure Management System (IMS), COS allows the customer to receive immediate response to their specific concerns and issues. Residents of the City of Houston may need assistance with various utilities problems such as, out of waters, broken water mains (Major and Minor), excursions, sewage-in residence, low pressure, meter breaks, service line breaks, broken fire hydrants and leaking valves.



Major Main Break



Meter Leak



Fire Hydrant Leak

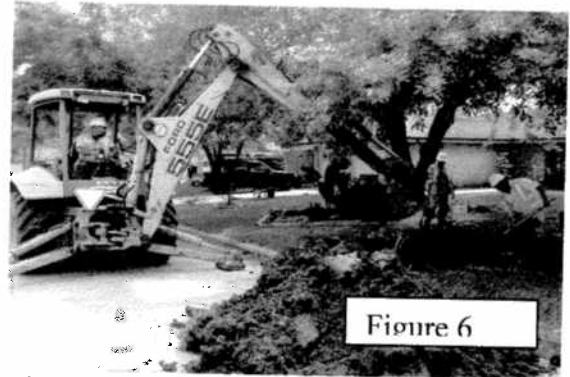


Minor Main Break

When residents of the City of Houston area, experience problems they must first contact the 311 customer call center. 311 will then create a customer requests for service after a series of questions are asked. In order to have a thorough investigation, a variety of questions need to be answered called flex questions. These questions will enable the call taker to better understand the situation and create the appropriate service request. The service request will contain customer address, name and phone number, description of service request (see figure 4), key map number for location, and the priority.

[illegible]

(Figure 5). Work orders are created electronically to the appropriate quadrant and its respective Scheduler/Planner. It is then verified on site to determine what is needed, what particular team would be scheduled to complete the repair as well as parts



and other special equipment needed to complete repairs in a timely manner. Any necessary permits such as Texas One Calls, side walk and street cut permits, street closures, would be acquired and noted on the work order prior to the repair team being scheduled. All UMB repair teams are professionals, trained to affect repairs in any situation. Below are pictures of the various types of repairs that a team may need to repair at any given time. The teams truck are equipped with a variety of specialty tools, and parts needed for any assignment. The photo above is of a team doing a sewer Repair with a large back hoe. The pictures below show the various types of repairs done by UMB teams:



**Service Line Replacement**



**Service Repair**



**Main Repair**



**Sewer Repair**

## **Restoration**

Restoration are completed only and if the excavation site has passed Repair Quality Assurance. This is done to assure that no further work is needed. The restoration team then comes out and Restores the excavated site back to its original appearance. Sod will be replaced, fences will be replaced and repaired. Driveways, street cuts, sidewalks, private walkways, shrubbery, floral plants, and anything that was disrupted will be replaced or repaired.



Site after Repair



Site after being fully Restored

Restorations after completion are then given an Restoration Quality Assurance Inspection to ensure that the customer is completely satisfied with the finished product.

## **Customer Callbacks**

Positive customer feedback is always important to any organization. UMB takes that extra step to ensure complete customer satisfaction. The customer callback program is set up to get feedback first hand from its customers to get their input on how the repair was completed, timeliness, and in general how our team performed in the repair to restoration process. UMB makes approximately 400 calls a month in order to get a measure of what the customer thinks. Since 2001 this program has monitored UMB's customers and found positive results in its findings. Although it's always UMB's goal to achieve 100 percent satisfaction we realize

that in a city of this size and with an infrastructure of this magnitude sometimes this is not always possible but we still try. The chart and graph below illustrates the importance of this program. The customers input will always show us ways in which we may improve our service efforts. Since FY 2005 UMB has constantly improved its service product to assure its customers that we are listening and adhering to their comments. So far in FY 2009 we have maintained 100 percent customer satisfaction rating.

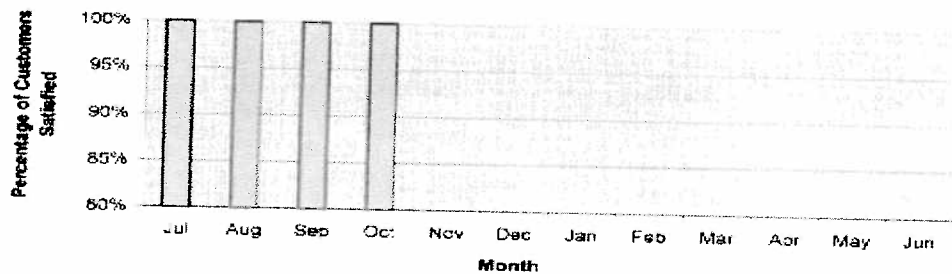
### Customer Satisfaction Report FY 2009

#### Performance Report

Month	Fiscal Year				
	2005	2006	2007	2008	2009
Jul	94%	94%	100%	100%	100%
Aug	100%	98%	100%	100%	100%
Sep	100%	99%	98%	100%	100%
Oct	100%	100%	99%	100%	100%
Nov	99%	99%	100%	100%	
Dec	100%	99%	100%	100%	
Jan	98%	99%	100%	100%	
Feb	98%	97%	100%	99%	
Mar	100%	100%	100%	99%	
Apr	100%	99%	100%	100%	
May	98%	98%	100%	100%	
Jun	98%	98%	100%	100%	

Total 98.75% 98.41% 99.75% 99.83% 100.00%

#### Customer Satisfaction Report FY 2009





## **Conclusion**

The Utility Maintenance Branch and its Central Operation Section plays an important role in the repair to restoration process. COS is responsible for updating service request, handling radio operations and communications, creating Work orders, issuing permits, compiling and researching data for the city's legal department, conducts Customer callback, and initiates investigations which in turn helps to create Work orders. UMB's repair teams all depend on COS's accuracy in the information given to them in order to do their job proficiently and expeditiously. The preparation of the permits and the work order tasks all keep the repair process flowing. By securing and maintaining customer feedback COS can gauge UMB's progress to ensure customer satisfaction. COS is a proven integral part of the UMB's efforts to be true to its mission statement "To be the nation's leading Public Utility champion for the environment providing reliable service of exceptional quality to the most satisfied customers in the nation."